

REMARKS

In the Office Action, the Examiner rejected claims 1-25. By the present Response, Applicants have amended claims 11 and 14. In addition, Applicants have corrected a minor informality in the Abstract. These amendments do not add any new matter. Upon entry of these amendments, claims 1-25 will remain pending in the present application. Reconsideration and allowance of all pending claims are respectfully requested in view of the arguments summarized below.

Objection to the Abstract

In the Office Action, the Examiner objected to the Abstract. However, the Examiner merely stated that “[t]he Abstract is objected because of a typographical error. See line 3. Appropriate correction is required.” See Office Action, page 2. Therefore, the Examiner was not specific regarding what was believed to be the typographical error. Furthermore, upon review, Applicants are unable to identify any typographical errors in line 3 of the Abstract. However, in an effort to advance prosecution, Applicants have corrected a minor informality in the Abstract, as detailed above.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1, 5, 6, and 8 under 35 U.S.C. § 102(b) as being anticipated by Teshima (U.S. Patent No. 6,272,470; hereinafter “Teshima”). In addition, the Examiner rejected claims 17-21, 24, and 25 under 35 U.S.C. § 102(b) as anticipated by Campbell et al. (U.S. Patent No. 6,047,259; hereinafter “Campbell”). Applicants respectfully traverse these rejections.

Legal Precedent and Guidelines

Anticipation under 35 U.S.C. § 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under 35 U.S.C. § 102, every

element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under 35 U.S.C. § 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Deficiencies of the Rejection of Independent Claim 1 Based on Teshima

Turning now to the present claims, Applicants contend that Teshima fails to disclose each element of independent claim 1. For instance, independent claim 1 recites, *inter alia*, “sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician *in the form of a decision tree of exams* to be performed on the patient.” (Emphasis added) In addition, independent claim 1 recites, *inter alia*, “requesting additional exams to be performed on the patient based on an analysis of results of the ordered exams, the analysis being done by an analyst and the additional exams being requested by the analyst *until an end of the decision tree is reached.*” (Emphasis added)

Applicants contend that Teshima does not disclose “sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician *in the form of a decision tree of exams to be performed on the patient,*” as recited in independent claim 1. In rejecting independent claim 1, the Examiner cited “at least Figures 6 and 7; column 4, lines 17-19; column 6, lines 22-24; column 16, lines 26-28).” *See* Office Action, page 3. However, Applicants contend that none of these passages

from Teshima discloses that a referring physician sends a request for ordering exams *in the form of a decision tree of exams to be performed on a patient*. Rather, the three passages cited by the Examiner read as follows:

The patient's main complaint and the observed physical findings are then entered. If necessary, an order is placed for an examination or medication.

Teshima, column 4, lines 17-19.

FIG. 7 is a flowchart explaining an outline of input processing of examination information and biomedical information;

Id., column 6, lines 22-24.

The doctor then inputs the patient's main complaint, his findings, treatment, further examinations, and medication dosage according to necessities and prescribed treatment.

Id., column 16, lines 26-28.

Applicants contend that none of these passages from Teshima disclose that a referring physician sends a request for ordering exams *in the form of a decision tree of exams to be performed on the patient*. Rather, the first passage merely states that an examination may be ordered based on a patient's main complaint and observed physical findings. In addition, the second passage merely introduces Figure 7, which is an outline of how examination and biomedical information may be input into a portable patient identification card disclosed in Teshima. Finally, the third passage merely describes how a doctor may input various types of information into the portable patient identification card disclosed in Teshima. Nowhere in these three passages does Teshima suggest that a referring physician sends a request for ordering exams *in the form of a decision tree of exams to be performed on the patient*. Furthermore, Applicants contend that there are no other passages within Teshima which disclose this recited subject matter.

Indeed, as briefly mentioned above, Applicants contend that Teshima is primarily directed to a system wherein healthcare-related information, such as examination and biomedical information, may be stored within a portable patient identification card, which may remain in the possession of the patient most of the time. However, Teshima does not disclose the use of requested exams *in the form of a decision tree of exams to be performed on the patient*. For instance, Figures 6 and 7, relied upon by the Examiner, merely disclose processes by which the portable patient identification card may be updated and maintained. As such, Applicants reiterate that Teshima does not disclose “sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician *in the form of a decision tree of exams to be performed on the patient*,” as recited in independent claim 1.

In addition, since Teshima does not disclose the use of requested exams *in the form of a decision tree of exams to be performed on the patient*, Applicants further contend that Teshima does not disclose “requesting additional exams to be performed on the patient based on an analysis of results of the ordered exams, the analysis being done by an analyst and the additional exams being requested by the analyst *until an end of the decision tree is reached*,” as recited in independent claim 1. More specifically, since Teshima does not disclose requested exams *in the form of a decision tree of exams to be performed on the patient*, Teshima cannot possibly disclose that additional exams are requested by an analyst *until an end of the decision tree is reached*,” as recited in independent claim 1.

For at least these reasons, among others, Applicants respectfully submit that independent claim 1, and the claims depending therefrom, are not anticipated by Teshima. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1, 5, 6, and 8 under 35 U.S.C. § 102 based on Teshima.

Deficiencies of the Rejection of Independent Claims 17, 24, and 25 Based on Campbell

Applicants also contend that Campbell fails to disclose each element of independent claims 17, 24, and 25. For instance, independent claims 17, 24, and 25 each generally recite, *inter alia*, “generating a *hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams.*” (Emphasis added)

Applicants contend that Campbell does not disclose “generating a *hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams,*” as generally recited in independent claims 17, 24, and 25. In rejecting independent claims 17, 24, and 25, the Examiner continually cited the passages from column 12, line 59 through column 13, line 39 of Campbell as disclosing this recited subject matter. *See* Office Action, pages 5 and 7. However, Applicants contend that these passages from Campbell do not disclose “generating a *hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams.*” Rather, these passages from Campbell read as follows:

The physical exam buttons represent the top level in a hierarchy of physical exam screens. The physical exam is broken into the following areas:

- 1) Overall Condition
- 2) Coat and Skin
- 3) Ocular
- 4) Otic
- 5) Oral/Nasal
- 6) Respiratory
- 7) Cardiovascular
- 8) Abdominal
- 9) Urogenital
- 10) Perineal
- 11) Musculoskeletal

- 11) Neurological
- 12) Behavioral

When the user clicks on any of these buttons, the system launches a new screen for the selected part of the physical exam. The interactive exam screens guide the user through the physical exam. As user enters information (by clicking on buttons or entering text), the server dynamically updates the database and evaluates the data to determine whether to prompt the user for additional information by displaying questions and supplemental screens that prompt the user to input medical observations.

During an initial exam, many of the observations listed in the exam screens default to normal. If an abnormal observation is checked, subsequent exams will default to the previous findings by displaying the abnormal observation as marked in a previous exam. In some instances where critical information is necessary, the user will not be allowed to exit from a screen until certain observations are made, as reflected by the user entering some observation.

Some observations trigger actions that need to be performed right away, and others trigger actions that can be performed later. In either case, the client monitors for this type of input, and when it detects the observation, it evaluates preprogrammed expressions to determine which actions should be performed right away or performed later. For actions that should be performed right away, it displays additional queries using message boxes or additional screens. As observations are made during the physical exam, the need to present additional screens is maintained in memory variables which control the operation and behavior of the exam as a whole, and the operation and behavior of individual sub-exam screens.

Campbell, column 12, line 59 – column 13, line 39.

Therefore, Applicants submit that these passages from Campbell merely disclose how an interactive system for managing physical exams may operate. For instance, as described in the passage, the interactive system may guide the user through a physical examination. However, Applicants contend that these passages from Campbell do not disclose the use of a *hierarchical listing of exams to be performed in desired sequences*. Rather, Applicants contend that the prompts generated by the interactive system of

Campbell will most likely be pre-programmed questions which guide the interactive system to provide a diagnosis for the patient. *See, e.g., id.*, column 13, lines 40-42.

In contrast, the present application is directed toward “generating a *hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams.*” In other words, the hierarchical listing of exams may include, for instance, a plurality of nodes corresponding to exams and their details. *See, e.g.*, Application, page 4, lines 6-9. Each node may be a “child” of one set of nodes and a “parent” to another set of nodes in the decision tree. *See, e.g., id.*, page 4, lines 11-12. Each node may, therefore, have no such child nodes downstream, or may have one or more child nodes. *See, e.g., id.*, page 4, lines 12-13. Similarly, each child node may have one or more parent nodes. *See, e.g., id.*, page 4, lines 13-14. The exams at child nodes comprise additional exams associated with the exam at the parent node. *See, e.g., id.*, page 4, lines 14-15.

However, Applicants contend that there is no indication that Campbell uses any such *hierarchical listing of exams*. Rather, as discussed above, it appears that a patient may merely be guided through a series of questions by the interactive system of Campbell. As such, Applicants contend that Campbell does not disclose “generating a *hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams,*” as generally recited in independent claims 17, 24, and 25.

For at least these reasons, among others, Applicants respectfully submit that independent claims 17, 24, and 25, and the claims depending therefrom, are not anticipated by Campbell. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 17-21, 24, and 25 under 35 U.S.C. § 102 based on Campbell.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 2-4, 7, and 9-16 under 35 U.S.C. § 103(a) as unpatentable over Teshima in view of Campbell. In addition, the Examiner rejected claims 22 and 23 under 35 U.S.C. § 103(a) as unpatentable over Campbell in view of Teshima.

Legal Precedent and Guidelines

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). In establishing a *prima facie* case for obviousness, “the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long-felt but unresolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1729 (2007) (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)). It is often necessary “to look to interrelated teachings of multiple patents, the effects of demands known to the design community or present in the market place; and the background knowledge possessed by a person having ordinary skill in the art.” *Id.* This analysis should be made explicit. *Id.* (citing *In re Khan*, 441 F.3d 977, 988 (Fed. Cir. 2006)) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”).

Additionally, a claim having several elements is *not* proved obvious merely by demonstrating that each of its elements was known in the prior art. *Id.* In this regard, the Supreme Court recently reiterated that it is “important to identify a reason that would

have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does...because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *Id.* As such, the obviousness inquiry does not hinge on demonstrating that elements were known in the art. Rather, the obviousness inquiry focuses on whether the claimed subject matter would have been obvious to persons having ordinary skill in the art in view of the demands and practices of the design community at the time of filing of the application. *See id.*

When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). The Federal Circuit has warned that the Examiner must not, “fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *In re Dembiczak*, F.3d 994, 999, 50 U.S.P.Q.2d 52 (Fed. Cir. 1999) (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)).

It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983); M.P.E.P. § 2145. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959); *see* M.P.E.P. § 2143.01(VI).

If the proposed modification or combination would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984); *see* M.P.E.P. § 2143.01(V).

Deficiencies of the Rejection of Independent Claims 11 and 14 Based on a Hypothetical Combination of Teshima and Campbell

Applicants contend that Teshima and Campbell, whether alone or in hypothetical combination, fail to disclose each element of independent claims 11 and 14. For instance, independent claims 11 and 14 both generally recite, *inter alia*, “sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician *in the form of a decision tree of exams* to be performed on the patient.” (Emphasis added) In addition, independent claims 11 and 14 both generally recite, *inter alia*, “requesting additional exams to be performed on the patient based on an analysis of results of the ordered exams, the analysis being done by the analyst and the additional exams being requested by the analyst *until an end of the decision tree is reached*.” (Emphasis added)

As discussed above with respect to independent claim 1, Applicants contend that Teshima does not disclose either “sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician *in the form of a decision tree of exams* to be performed on the patient” or “requesting additional exams to be performed on the patient based on an analysis of results of the ordered exams, the analysis being done by the analyst and the additional exams being requested by the analyst *until an end of the decision tree is reached*,” as recited in independent claims 11 and 14. In particular, Teshima entirely fails to disclose the use of *decision trees of exams*. Furthermore, as discussed above with respect to independent claims 17, 24, and 25, Applicants contend that Campbell does not disclose the use of *hierarchical listings* (*i.e.*,

decision trees) of exams. As such, Applicants further contend that any hypothetical combination of Teshima and Campbell necessarily fails to disclose the subject matter recited in independent claims 11 and 14.

For at least these reasons, among others, Applicants respectfully submit that independent claims 11 and 14, and the claims depending therefrom, are not rendered obvious by a hypothetical combination of Teshima and Campbell. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 11-16 under 35 U.S.C. § 103 based on a hypothetical combination of Teshima and Campbell.

Deficiencies of the Rejections of Dependent Claims 2-4, 7, 9, 10, 22, and 23

Dependent claims 2-4, 7, 9, 10, 22, and 23 all depend from either independent claim 1 or independent claim 17. As discussed in greater detail above, Applicants contend that both Teshima and Campbell fail to anticipate each element of independent claims 1 and 17. In addition, Applicants further contend that any hypothetical combinations of Teshima and Campbell also cannot render the recited subject matter obvious. Accordingly, Applicants respectfully request withdrawal of the rejections of dependent claims 2-4, 7, 9, 10, 22, and 23 under 35 U.S.C. § 103 based on a hypothetical combination of Teshima and Campbell.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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/Patrick S. Yoder/
Patrick S. Yoder
Reg. No. 37,479
FLETCHER YODER
P.O. Box 692289
Houston, TX 77269-2289
(281) 970-4545